### **ELECTRONIC MONITORING**

VOICE VERIFICATION (VV)—A voice print template is made of the offender who receives random or scheduled calls at the residence or offender could make calls from approved remote locations (work). No equipment is needed. Cost is \$1.88 per day.

RADIO FREQUENCY (RF)— A home monitoring receiver unit with the offender's phone attached, a phone cord to the phone jack and plugged into power. The offender wears a waterproof transmitter on the ankle that does alert of strap tamper (strap or clip cut and/or opened) and/or body tamper (not against the skin). This unit used mostly on high risk offenders monitors the offender's arrivals and departures and the curfew hours. Cost is \$2.87 per day offender is monitored.

VB – VIDEO DISPLAY/BREATH ALCOHOL TEST – This unit consists of a Video display telephone for visual verification of the offender's presence with the Breath alcohol test for alcohol consumption assessment. This unit is used on high risk offenders with alcohol history. The cost is \$4.00 per day offender is monitored.

VBR – VIDEO DISPLAY/BREATH ALCHOL TEST/RADIO FREQUENCY – This unit is the same as the VB (above) with the Radio Frequency transmitter added to also monitor the offender's arrivals and departures. The cost is \$6.00 per day offender is monitored.

GPS – GLOBAL POSITIONING SATELLITE – This unit will report time and date of arrival and departure, the travel path and times, removal or tampering of transmitter and the monitoring unit and violations of exclusion zone (designated area that offender is restricted from entering). This unit is used mostly for high risk sex offenders, interstate compact offenders and also for some pre-trial release offenders. The offender also wears the Radio Frequency transmitter. This unit will report in at least four times a day. The cost is \$4.75 per day offender is monitored.

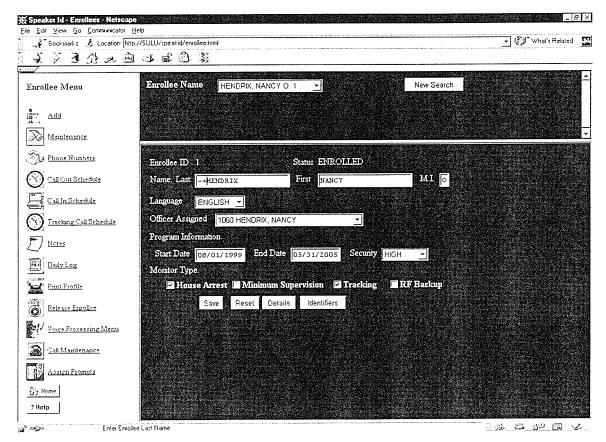
GPS – GLOBAL POSITIONING SATELLITE – CELLULAR – This unit is the same as above but has cell phone and it can report immediately. The cost is \$7.25 per day.



# **SpeakerID System Description**

The SpeakerID system is an electronic monitoring and caseload management tool that provides criminal justice agencies with a cost-effective, reliable and efficient means of supervising and monitoring offenders participating in community-based alternative programs. SpeakerID is actually three programs fully integrated into one comprehensive system: SpeakerID/EMS (Electronic Monitoring System), SpeakerID/MSR (Minimum Supervision Reporting) and SpeakerID/TRK (Tracking System).

The SpeakerID/EMS system is an electronic monitoring program that uses a voice verification technology, the Public Switched Telephone Network and a standard telephone to verify the presence of an individual at a specified location or locations. The system uses a computer to generate random and/or scheduled calls to authorized locations during specified time periods. The identity of the individual is then verified using a state-of-the-art voice verification technology. The system can also accept incoming calls from individuals that are required to report in from remote locations. On all incoming calls, the ANI of the originating phone number is validated, in addition to the verification of the individuals identity. By combining these two calling processes, the SpeakerID system has the ability to monitor and track individuals throughout the day, even though they may be authorized to leave their permanent residence.



The SpeakerID/MSR system is a computerized caseload management program that automates the reporting process of offenders sentenced to terms of administrative probation or minimum supervision. The system accepts incoming calls from individuals that are required to report in from remote locations. On all incoming calls, the ANI of the originating phone number is validated, the calling party is prompted to respond to a series of individualized questions and the identity of the individual is verified using a state-of-the-art voice verification technology. When a scheduled call is not received, the voice verification fails or the originating phone number has not been authorized, an exception is created and the supervisor is automatically notified. A supervisor notification is also generated when there is a change in the status of the individual reporting in; however, status changes are not necessarily treated in the same manner as exceptions.

The SpeakerID/TRK system is a computerized tracking program that requires the offender to call into the system from predetermined locations (i.e. work, school, rehab, etc.) during a specified scheduled time frame. As in SpeakerID/MSR, the ANI of the originating phone number is validated and the identity of the caller is verified. If the offender fails to call, reports in from an unauthorized location or fails the voice verification an exception is created and a notification is generated.

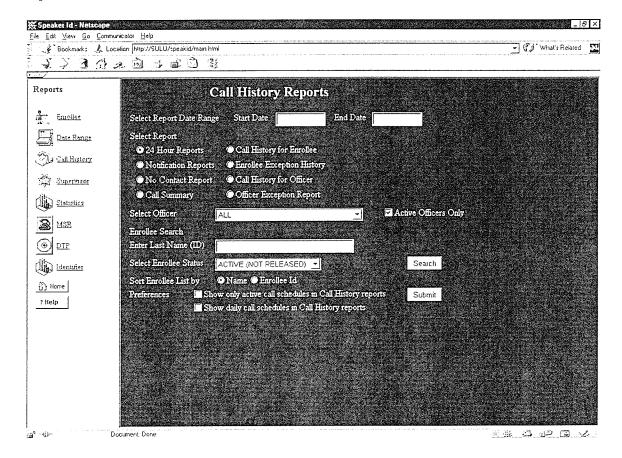
By combining the features of these three programs (SpeakerID/EMS, SpeakerID/MSR and SpeakerID/TRK) into one comprehensive system, criminal justice agencies can use the SpeakerID system to effectively monitor a wide range of community correction program participants. The system is designed to be extremely flexible with respect to the level of supervision the system can provide. The level of electronic surveillance imposed on an individual can be easily adjusted by simply changing the type of reporting and/or the number of verification contacts required. The system also incorporates several features that make it unique, and superior, to other similar products available in the market today. Some of these features include:

- Voice Verification Technology: The SpeakerID system uses a proprietary voice verification technology that has an accuracy rating of over 97% accurate and as a result, the authentication of the offender's identity is extremely reliable and the number of "false alarms" is minimized.
- User defined data management function: The SpeakerID system provides the unique capability of allowing each supervising agency to define the specific data to be captured by the system and, in turn, made available for management and program reporting. This data management function allows each agency to configure the system to meet their specific programmatic and case management needs.
- Customized Reporting Criteria: The SpeakerID/MSR system has the unique capability of allowing agencies to select the specific questions that are asked of individual offenders when they report in, and the sequence or order in which the questions are asked. In addition, the system also supports the ability for agencies to develop new or customized questions when the need arises. This customized

reporting criteria feature allows agencies to easily tailor the SpeakerID/MSR system to their specific case management needs and obtain the individualized offender status information they require.

• Drug Testing Notification: The SpeakerID system can be used to notify participants of random drug testing or any other unscheduled reporting requirements mandated by the terms of their supervision. Based on the reporting or testing parameters entered by the supervising agency, the system will randomly select participants for testing and will notify them of their need to report for testing when they call in.

In addition to the flexibility and customization capabilities incorporated into the SpeakerID application, the system supports a wide range of management, operational and statistical reports.



The system's ability to be tailored to the specific needs of each agency and/or program make it ideally suited for a wide range of community-based alternatives from house arrest or work release type programs to curfew or day reporting programs.



# EMS 2000i System Description

# **General Description**

The EMS-2000i electronic monitoring system is designed to monitor participants at a residence. This is a secure, active, RF system that has been field proven in some of the nations largest agencies. The EMS 2000i is considered one of the most reliable, easy and secure house arrest architectures ever developed.

### The EMS-2000i Transmitter

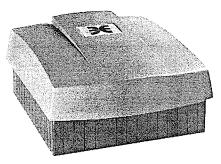


The EMS-2000i transmitter is field proven and offender tested. The transmitter is securely attached to the participant in a one step process that makes for easy installation. The transmitter has an eighteen (18) month active battery life. The transmitter battery is sealed to insure the unit is waterproof. The transmitter is water and moisture proof up to 25 feet of water, and is shock resistant to 98gs.

The transmitter uses a dual technology to insure strap continuity. It has a multi-wire conductive strap that sends a signal immediately when severed or the clips are broken. Secondly, the transmitter is equipped with a proximity tamper, so if the unit is removed from the offender with the

strap still in tact, the unit will signal a tamper.

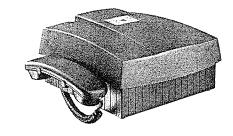
### The EMS-2000i HMRU



The EMS 2000i Home Monitoring Receiver Unit (HMRU) utilizes a smart box configuration. This unit features two-way communication, fully programmable range and leave window, 32 hour internal battery backup, security features monitoring AC power, telephone line and case integrity. Also, the HMRU will note every transmitter that comes within range of the unit, giving the supervising officer a listing of all offenders

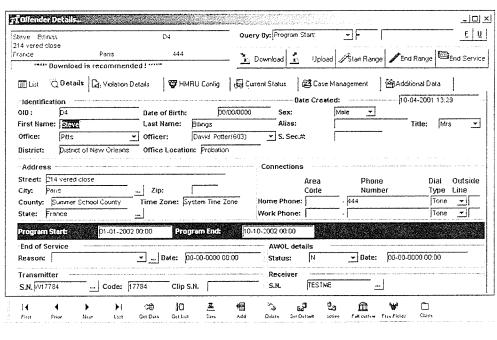
who come within range of a particular participant.

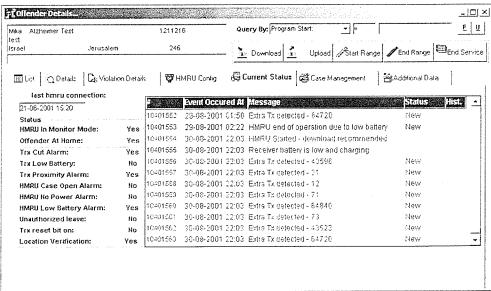
Also the HMRU has a cellular version of the same proven unit. This unit will operate without the presence of a telephone line. The cellular unit has a sixteen hour battery backup and will operate on the AMPS or GSM cellular networks.



### EMS 2000i Software

The EMS software is a user friendly, windows based application that offers complete customizable features for a using agency. The software offers an agency the ability to capture all statistical data on gathered information. Also, all parameters are programmable by offender, officer or agency and violations are settable to the offender level. The software is accessible via the internet, through a secured connection, which allows authorized users the ability to add and edit offender information and schedules, monitor up to the minute participant activity and view and/or print a host of standard reports.



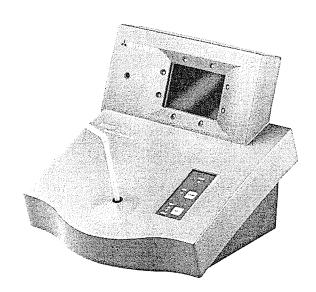




# MEMS 2000 System Description

# **At-Home Breath Alcohol Testing System**

The VBR 2000 (Video, BAT and RF) is an electronic monitoring device that is comprised of a Video Display Telephone, Breath Alcohol Tester (BAT) and the advanced EMS-2000i Radio Frequency (RF) System. The three components are housed in one fully integrated unit measuring just 11" x 11" x 9.5"(L x W x H). The two-tone gray unit consists of an ABS flame-retardant plastic which is designed for durability. The operational switches are covered for easy cleaning and tamper resistance and the vents are filtered to prevent the intrusion of insects and debris into the chassis.



The VBR 2000 is powered by a standard 110V AC power source. No permanently attached wires or cables are visible on the outside of the unit, as the VBR 2000 utilizes connection jacks for telephone, telephone line, and power. It is equipped with an internal back up battery capable of providing up to 18 hours of emergency power, in the event of a commercial electrical failure at the home site.

# The Video Display Telephone



The Video Display Telephone sends a still black and white image to the Central Monitoring Station in 9 to 12 seconds, using a CCD camera with external infrared LEDs to provide lighting. The camera is mounted behind a two-way mirror for the purpose of positioning the client's image properly prior to sending a picture. With resolution of 242 pixels x 200 lines and a gray scale level of 50, the client's image is transferred to the monitoring center by pushing a single button.

### The Breath Alcohol Tester

The VBR 2000 utilizes an Electro-Chemical Breath Alcohol Tester (BAT) that is capable of providing highly accurate alcohol consumption assessments by analyzing a deep lung sample, achieving an accuracy rate of +/- 5%. The BAT is used in conjunction with the Video Display

Telephone to identify and confirm that the subject taking the test is the program participant. The BAT sends commands to advance the voice prompts from the computer and to inform the computer of test results or any errors that occur.

An interface circuit combines the Video Display Telephone with the Breath Alcohol Tester. The interface circuit tells the Video Display Telephone when to capture and send the client's image and tells the BAT when to send the test results.

Agencies also have access to offender data via the EMS 2000 application accessible via any internet connection. An offender's monitoring parameters can be programmed and BAT results, including images, can be reviewed.

## The EMS-2000i Radio Frequency

The VBR 2000 utilizes the advanced, field proven EMS-2000i transmitter and an integrated receiver. The transmitter is securely attached to the participant in a one step process that makes for easy installation. The transmitter has an eighteen (18) month active battery life. The transmitter battery is sealed to insure the unit is waterproof. The transmitter is water and moisture proof up to 25 feet of water, and is shock resistant to 98gs.

The transmitter uses a dual technology to insure strap continuity. It has a multi-wire conductive strap that sends a signal immediately when severed or the clips are broken. Secondly, the transmitter is equipped with a proximity tamper, so if the unit is removed from the offender with the strap still in tact, the unit will signal a tamper.



# SATELLITE TRACKING AND REPORTING SYSTEM

#### **STaR**

Satellite Tracking and Reporting System

#### A new level of monitoring

**Elmo-Tech's** new **STaR** system takes monitoring outdoors, enabling program operators to apply tight surveillance programs in cases that require it.

- 24/7 location reports
- Exact path surveillance
- Restricted "hot", off-limits zones alerts
- Scheduled zones management

### The STaR System Operation Principles

**Elmo-Tech's STaR** system is based on highly advanced global positioning satellite (GPS) system components, and **Elmo-Tech's** field-proven RF monitoring technology. Offenders wear a body-secured transmitter and are assigned personally customized schedules and zone limitations for effective supervision.

The **STaR** system communicates with the monitoring center to report locations or violations of the monitored offenders, based on their assigned schedules, around the clock. Extended memory capacity enables the unit to process and store a large amount of data, prior to uploading it to the monitoring center.

The **STaR** system continuously tracks the monitored offenders in real-time, stores and processes their positioning information. Operators define and control a preferred reporting mode:

## Active, real-time reporting mode

- Immediate notifications to the monitoring center of any deviations from the restrictive regime
- Events uploads at pre-set time intervals
- Intensified or decreasing reporting intervals, pending violation status

#### Passive, delayed reporting mode

Where information is not required in real time, the **STaR** system can also perform passive tracking, uploading all logged events to the monitoring center at set intervals, minimizing operational costs by saving battery power and communication expenses.

While at home, the offender's presence is actively monitored by the integrated RF monitoring

system. When leaving their homes, the offenders take their personal locating unit with them. The personal locating unit automatically acquires GPS data and activates continuous location data collection.



- Palm sized (14cmX8cmX3.5cm or 5.5'X3.1'X1.4'), lightweight
- Efficient 16-24 hours\* power source
- Water resistant
- Optional message display
- Friendly user interface

### Optional interactive communication

The **STaR** system is equipped with bi-directional communication capabilities. Operators can send offenders text messages, and get their acknowledgment in response.

## A Series of User Configurable Alerts

- Location limitations
- Approach towards off-limits zones
- Presence inside off-limits zones
- Leaving pre-defined zones
- Exact path surveillance ("bread crumbs")
- Tamper attempts

- Battery power
- Interrupted communication

## Dynamic Monitoring Software User Interface

- Animated digital maps, clearly shown offenders' paths
- Advanced address matching capability
- Integrated graphical information system engine
- Scalable map display
- Detailed, user defined, map supported reports

## Leading-Edge Transmitter Capabilities

The **STaR** utilizes **Elmo-Tech's** range of offenders' body-secured transmitters:

- Triple tamper detection
- Longer lasting, 2 and 3 years batteries
- Varying transmission rates
- Re-usable straps
- Waterproof

